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Meeting Minutes Transmittal/Approval
Tri-Party Agreement Milestone Review Meeting
EPA Conference Room
Richland, Washington
June 9, 1992

From/ Appvl.:	Steven H. Wisness, RL (A5-19) Hanford Project Manager	Date:	7/22/92
Appv1.:	Paul T. Day, EPA (B5-01) Hanford Project Manager	Date:	7/22/92
Appv1.:	Adve Mylandu for David B. Dansen Hanford Project Manager	Date:	7/22/92
Prepared Appv1.:	- 1. Colombial for	Date: ompany	1/22/92



TPA Milestone Review Meeting Minutes Transmittal/Approval June 9, 1992 (sheet 2 of 6)

1. MEETING MINUTES

The minutes from the April meeting are being revised and will be reissued for review and sign off at the June 24 meeting.

2. MILESTONE M-01

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The information (attachment 1) was presented by George Sanders of RL. In the discussion of open issues, the following actions were assigned:

• Action: Ecology will provide RL with a letter concurring with the

proposed strategy for rehydrotesting grout vault 103, upon receipt of the official rehydrotesting proposal from RL.

Actionee: J. Witzak Due: June 30, 1992

Action: DOE will provide Ecology with a copy of the Grout C-2 Analysis.

Actionee: G. Sanders Due: July 31, 1992

Delay of the restart of the grout facility was discussed in detail with Ecology and EPA. Mr. Bracken expressed concern with DOE's ability to maintain the current grout milestone schedules and stated that DOE was preparing a technical issue paper to address the problems. He suggested that the three parties meet toward the end of June to discuss the issue paper. Specific problems associated with the performance assessment as well as the potential impact of a negative NRC ruling concerning incidental waste were described by Ken Bracken as the two issues most likely to impact current grout milestone schedules. Two actions resulted from this discussion:

• Action: RL will provide the Grout Issue Paper to Ecology and EPA.

Actionee: G. Sanders Due: June 19, 1992

Action: RL will provide a resource loaded schedule to regulators.

Actionee: G. Sanders Due: July 31, 1992

• Action: RL will finalize the report on the grout hydrogen generation and

transmit the report to Ecology.

Actionee: G. Sanders Due: July 18, 1992

TPA Milestone Review :Meeting Minutes Transmittal/Approval June 9, 1992 (sheet 3 of 6)

Ecology was asked to push the NRC for a decision on the petition. No formal action resulted. EPA requested that DOE work closely with EPA on land disposal restrictions as they relate to grout disposal. EPA stated that, to date, DOE has not demonstrated that grouting constitutes Best Demonstrated Available Technology for low-level mixed waste.

3. MILESTONE M-02

The information (attachment 2) was presented by Jon Peschong of RL. The current status of pretreatment was reviewed with specific discussion on use of B-Plant as a pilot plant and upcoming workshops on TWRS technology. RL provided Ecology with a copy of the TWRS Technology Workshop draft Agenda for the June meeting. The following action resulted from the discussion:

 Action: Issue letter to the EPA regarding a RCRA RD&D permit for pretreatment pilot plant testing at B-Plant.

Actionee: J. C. Peschong Due: July 17, 1992

Paul Day encouraged RL to have discussions with Dan Duncan and Carrie Sikorski of EPA before finalizing the letter on the use of B-Plant for pilot plant operations.

RL provided Ecology with a copy of the "Fiscal Year 1992 Tank Waste Disposal Work Plan," which closed out an RL February commitment to submit the "TWRS Implementation Plan."

4. MILESTONE M-31

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The information (attachment 3) was presented by G. R. Konzek of RL. Progress on the Multi-Function Tank Facility was statused. Discussion centered on the status of the Functional Design Criteria (FDC) and the projected 400 million dollar plus cost of the facility. An independent cost estimate has been performed to try and identify where money can be saved. The FDC will be finalized in June, incorporating some of the cost saving suggestions. Mr. Konzek stated that M-31-02 will likely be missed due to lack of funding.

 Action: Provide Ecology with a copy of the approved FDC for the Multi-Function Tank Facility.

Actionee: Glenn Konzek Due: July 17, 1992

5. MILESTONE M-03

The information (attachment 4) was presented by R. W. Brown of RL. The presentation updated the status of the project design effort and highlighted that the next big milestone would be the initiation of construction of the vitrification foundation due in March 1993. Mr. Brown stated that he believed all current HWVP milestones were on schedule and will be met. No actions resulted from this discussion.

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6. MILESTONE M-04

The information (attachment 5) was presented by M. Dev of RL. A summary of the material which comprises this report was given, with emphasis placed on the fact that the reporting period for this report is through February 1992 and does not cover subsequent developments. Mr. Dev stated that this milestone was on schedule. No action resulted from this discussion.

7. MILESTONE M-06

The information (attachment 6) was presented by Bruce Nicoll of RL. The status of this program was briefly discussed and it was noted that DOE is currently reviewing the draft M-06 detailed programmatic plan. DOE will set up a formal meeting with the regulators prior to September 1992 after discussion with DOE-HQ, to review the proposed approach with the regulators. Mr. Nicoll stated that no funding or schedule problems exist for this milestone. No formal action was generated from this discussion.

8. MILESTONE M-07

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The information (attachment 7) was presented by Bruce Nicoll of RL. Discussion centered on the potential for delay in completing this milestone if long-reach manipulators are used for retrieval. The milestone is achievable if a low technology hydraulic sluicing approach is used. RL proposed a telephone conference to discuss Ecology's recent draft change request which would impact the M-07 milestone. The teleconference was agreed to but no formal action resulted.

9. MILESTONE M-08

The information (attachment 8) was presented by Bruce Nicoll of RL. A question was raised on the status of the Supplemental Environmental Impact Statement (SEIS) Notice of Intent (NOI) which documents that tank retrieval is the basis for future planning. RL replied that the SEIS NOI is on schedule and will be published in the Federal Register in July. No action item resulted from this presentation.

10. MILESTONE M-09

This information (attachment 9) was presented by Ryan Pestes of RL. Mr. Pestes stated that this milestone was in jeopardy due to retrieval technology problems and final NEPA decisions.

Paul Day requested that future presentations should provide detail on why a milestone is in jeopardy and the efforts being taken to re-establish the schedule. The Hanford Remedial Action (HRA) EIS was discussed. Paul Day requested additional information on the status of the HRA EIS.

The budget is approximately 10% underspent at this time due to delays in performance assessment work. The DOE forecast is for a slight over expenditure by October 1992.

TPA Milestone Review Meeting Minutes Transmittal/Approval June 9, 1992 (sheet 5 of 6)

Action: Provide supplemental information on the status of the HRA EIS.

Actionee: Liz Bracken Due: TBD

11. MILESTONE M-05

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The information (attachment 10) was presented by G. E. Bishop of RL. There was a general discussion on the definition of "criticality" relating to the delay of pumping Tank C-102. EPA also asked about the change request previously submitted for M-05-03. RL answered this was denied and later withdrawn. During the discussion on milestone schedule assessment, RL reported the M-05-04 schedule is being impacted by the resolution of the criticality issue. A justification of Continued Operations (JCO) is in process, but the JCO is only partially accepted by HQ at this time. Consequently the original schedule for the resumption of pumping of the five tanks by June 30, 1992, will not be met. The JCO was discussed by John Clark of RL who also reported HQ has approved limited transfers of newly generated waste to the tank farms. RL will forward the documentation of the authorization for limited waste receipts to Paul Day and Roger Stanley with copies to David Jansen and Dave Nylander.

• Action: Provide EPA and Ecology with the HQ documentation authorizing

limited waste receipts.

Actionee: John Clark Due: June 19, 1992

Action: Provide documentation of the material condition of the Single

Shell Tank farms for the SST stabilization Technical Discussions,

currently slated for June 23, 1992.

Actionee: Rick Raymond Due: June 23, 1992

Action: Provide status to Ecology when pumping of SST can be resumed.

Actionee: Rick Raymond Due: June 23, 1992

Action: Provide to Ecology a draft copy of SST safety study prior to the

June 23, 1992 technical discussion.

Actionee: Guy Bishop Due: June 19, 1992

RL closed the discussion by emphasizing that this milestone is in serious trouble and said the regulators are being kept up to date, but a "game plan" needs to be developed. A June 23 meeting has been set between DOE and Ecology (EPA invited) to discuss issues in detail.

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12. MILESTONE M-10

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The information (attachment 11) was presented by Paul Hernandez of RL. The status of core sampling activities was discussed. Completion of 20 core samples is on schedule. However, added scope items and technical complexities in the R&D of the rotary mode sampling system have been encountered. DOE stated that the completion of milestone M-10-13 will be delayed at least six months.

Paul Day enquired on the status of the analysis of the 13 cores taken to date. John Propson summarized the status as follows:

- T-111 (3 cores) is scheduled to be completed in October 1992
- B-202 (2 cores) October 1992
- C-112 (3 cores) October 1992 (first core), November 1992 (2nd), December 1992 (3rd)
- B-201 (2 cores) December and February 1993

Discussion on the current status of the laboratory analysis took place. The news that tank farms could receive newly generated waste will allow the 222-S Lab to resume analyses that result in significant generation of liquid waste in the near future.

AGENDA
TRI-PARTY AGREEMENT MAJOR MILESTONE MANAGEMENT REVIEW

Tuesday, June 9, 1992					FED/Room 780
TIME	MILESTONE	TITLE	RL DIVISION DIRECTOR	LEVEL 2/3 MANAGER	PRESENTER
8:30 am	M-01-00	Complete 14 Grout Campaigns	Lief Erickson	J. L. Epstein	G. H. Sanders
9:00 am	M-02-00	Pretreatment	K. W. Bracken	W. C. Miller	J. C. Peschong
9:30 am	M-03-00	Initiate HWVP Operations	R. W. Brown	D. J. Newland	R. W. Brown
10:00 am	M-31-00	Additional DSTs	R. W. Brown	V. R. Dronen	G. R. Konzek
10:30 am	M-04-00	Annual Treatability Studies	K. W. Bracken	W. C. Miller	M. Dev
11:00 am	M-06-00	Develop SST Retrieval Tech.	Lief Erickson	M. K. Mahaffy	B. L. Nicoll
	M-07-00	Demonstrate SST Retrieval	Lief Erickson	W. C. Miller	B. L. Nicoll
11:30 am	M-08-00	Full-Scale Farm Closure Demo.	Lief Erickson	W. C. Miller	B. L. Nicoll
	M-09-00	Closure of 149 SST's	E. A. Bracken	R. D. Wojtasek	R. H. Pestes
12:00 am		LUNCH			
1:00 pm	M-05-00	SST Stabilization	R. E. Gerton	R. E. Raymond	G. E. Bishop
1:30 pm	M-10-00	SST Core Sample Analysis	R. E. Gerton	J. G. Propson	P. R. Hernandez
2:00 pm		General Discussion			
3:00 pm		Adjourn		•	

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ATTENDEES

TPA MILESTONE MANAGEMENT REVIEW

JUNE 9, 1992		FED/R00M 780
NAME	ORGANIZATION	MAILSTOP
	WHC/TWSC	R2-14
JOHN C- PROPSON		
Paul Hernandez	DOE/PL	A4-02
the prince	DOE/PL.	27-15
LOHN CLARK	DOE/RL	A4-02
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ATTENDEES

TPA MILESTONE MANAGEMENT REVIEW

JUNE 9, 1992	2		FED/ROOM 780
NA	1E '	ORGANIZATION	MAILSTOP
Chery 1 U	loung	Business Planning	B3-62
, 4	montdam	Ecology	Lary,
, STEVEN	BARKER	WHC/WPT	R2-07
Rober	+ Brown	DOE-RL	A5-10
B:11 W	iller	WHC TWD	54-55
Rod (Louge	witc/ HWVP	66-02
DAVE_	raissi	IVHC/T,2A	30-35
Mike	Maha ffey	WHC/TD	44-73
· VERNO	o HALL	WHC/TWRS FROG. INTEG.	<u> </u>
JON	Yerxa	00E-RE	A5-15
Ryan	Parles	DOE -RL	A5-10
Rick Ke	ymond	WHC	R1-80
Guy 1	Bisud	DOE-RC	RZ-62

ATTENDEES

TPA MILESTONE MANAGEMENT REVIEW

JUNE 9, 1992		FED/R00M 780
NAME	ORGANIZATION	<u>MAILSTOP</u>
F.T. CALAPRISTI	WHC/TPA	B2-35
LEIF ERICKSON	DOE-RL	
KEN BRACKEN	DOF-RC	
JOE ERSTEIN	WHC Growt	R4-01
MADAN DEV	DOE-RL	A5-21
JON PESCHONG	DOE-PL	A5-21
Dola Lindson	WHC/TPA	132-35
Steve Wisness	DOF-RL	
DAVE NYLANDER	Ecology	Kennewich
LOE WITCZAK	Ecow67	OLYMPIA
Paul Day	EPA	B5-01
Scott Mckinney	<u> Ecology</u>	Lacey office
GEORGE SANDERS	DOE-RL	<u> </u>

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(ATTACHMEN 1)

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Grout Facilities Milestone M-01-00 Complete 14 Double-Shell Tank Grout Campaigns

State of Washington Department of Ecology and U.S. Environmental Protection Agency

Leif Erickson, RL Division Director George Sanders, RL Branch Chief Joe Epstein, WHC Level 3 Manager

June 9, 1992

Milestone Description

MO-01-00

Complete 14 grout campaigns of double-shell tank (DST) waste by December 1996 and maintain currency with feed thereafter.

Baseline Schedule

Complete 14 campaigns by December 1996.

Open Commitments

Action:

Provide the State's position on vault 103.

Responsibility:

T. Michelena

Due Date:

February 28, 1992

Status:

Informal discussions have resulted in RL

Programs/WDOE agreement on position. Formal letter

from RL to WDOE.

Action:

Provide a copy of the draft grout C-2 analysis to the

State in parallel with DOE-HQ review.

Responsibility:

G. Sanders

Due Date:

March 6, 1992

Status:

C-2 being reviewed within RL.

Accomplishments

•	Completed installation of topping slabs on vaults 102-105.	March 1992
•	Completed air leak testing, test results met acceptance criteria.	April 1992
•	Completed vault 102, 103 piping pits.	April 1992
•	Completed plan for resubmittal of Grout Performance Assessment.	April 1992
•	Completed core drilling of vault 101.	March 1992
•	Completed pilot plant formulation pour.	Anril 1992

Planned Activities

•	Submit FSAR, Revision"0", to RL.	July 1992
•	Completion of tank integrity assessment.	July 1992
•	Submittal of certified Grout Part B Permit Application.	July 1992
•	Complete construction of vault 102.	July 1992
•	Complete resolution of vault 103 leak test.	July 1992
•	Issue pilot plant formulation test results.	August 1992
•	Complete ORR applicability analysis checklist.	December 1992
•	Resubmit PA to DOE-HQ Peer Review Group.	March 1993
•	Initiate discussions with regulators on grout technical/schedule concerns.	June 1992

Milestone Assessment

		<u>Schedule</u>	TPA Baseline	<u>Status</u>
•	M-01-01A	Complete and verify 2 campaigns (101, 102).	9/93	Minimum 1 yr delay
•	M-01-01B	Complete 1 additional campaign (103).	12/93	Minimum 1 yr delay
•	M-01-02	Complete 3 additional in 1994 (104, 105, 106).	12/94	TBD
•	M-01-02A	Initiate construction vaults 106-109.	11/92	TBD
•	M-01-03	Complete 4 campaigns in 1995 (107-110).	12/95	TBD
•	M-01-03A	Initiate construction of vaults 110-113.	11/93	TBD
•	M-01-04/00	Complete 4 campaigns in 1996 (111-114).	12/96	TBD
•	M-01-04A	Initiate construction of vault 114.	11/94	TBD

Milestone Assessment (cont.)

- One-year delay forecasted to near-term milestone (M-01-01A)
 - Performance Assessment critical path
- Cost versus Budget

FYTD Budget	FYTD Cost	Variance	FY 1992 Annual Budget	Variance Explanation
22356	22356	0	35800	N/A

Milestone Assessment (cont.)

- Technical Scope completion/review/approval of program critical documents:
 - Performance Assessment
 - FSAR, Revision "0"
 - RL/DOE-HQ approval of Operational Readiness Review
 - Resource loaded, integrated schedule for current plan
- Resolution of technical issues/DOE concerns regarding radionuclide inventory, adequacy of diffusion barrier, and land disposal restrictions.
- Resolution of hydrogen generation.
- Formulation/vault filling ability.

Special Topics

Key Issues

- · Ecology's concerns on hydrogen generation.
 - Generation rate evaluation report significantly less than Whyatt Report, estimated 120 x less.
 - Time Spacial Concentration Profile Report completing final draft.
 - FSAR update planned.
 - Discussions/agreement with WDOE.
 - Facility recommendations.
- NRC ruling on petitions of States of Washington and Oregon along with Yakima Indian Nation with respect to high-level waste definition.
- DOE concerns on radionuclides, adequacy of barrier, and land disposal restrictions.

Special Topics (cont.)

Change Notice Activity

Draft Tri-Party Agreement change request submitted to RL for evaluation.

Action Items

- WHC to resubmit PA, FSAR, ORR, and Part B Permit Application.
- RL/HQ approval of PA, FSAR, and ORR.
- Ecology/EPA issue of permit.
- DOE to evaluate data to resolve issue on radionuclides, land disposal restriction, and adequacy of barrier.
- WHC to resolve hydrogen concerns on 106-AN with Ecology.

(ATTACHIVENT O)

INITIATE PRETREATMENT OF DOUBLE-SHELL TANK WASTES

Milestone M-02-00

J. C. Peschong

Treatment Program Division

June 9, 1992

Milestone Description

• M-02-00

Initiate pretreatment of double-shell tank waste

Double-shell tank waste pretreatment is required prior to disposal of high-activity tank wastes. The pretreatment supports the removal, treatment, and final disposal of wastes subject to land disposal restriction which are stored in double-shell tanks. Removal of the wastes from double-shell tanks and disposal in grout or glass will allow double-shell tank space to be made available for single-shell tank waste

- DELIVERABLE(S)
- Program documents which define plans to develop, demonstrate, and implement pretreatment processes for tank wastes (M02-03).
- Start DST NCAW retrieval system process test (M-02-04)
- Incorporate additional interim milestones to support pretreatment of double-shell tank waste (M02-05)

Milestone Description (Cont)

BASELINE SCHEDULE (Interim)

- Submit tank waste remediation system baseline scope, cost, and schedule by August 1993 (MO2-03)
- Start DST retrieval process test by December 1996 (M02-04)
- Incorporate additional milestones for pretreatment by August 1993 (M02-05)

Accomplishments (Last three months)

 Tank Waste Remediation System (TWRS) Decision Plan issued on February 15, 1992 and revised and reissued on March 27, 1992 and May 8, 1992 (six-week updates)

Initiated development of TWRS Integrated Technology Plan

 Completed initial TWRS Technology Workshop in February 1992, completed second set of workshops in May 1992, and developed plans for national workshop in June 1992

Accomplishments (Last three months) (Cont)

- Began preparation of TWRS Functional Requirements Baseline document; final document due March 1993
- Single-Shell Tank Systems Engineering Study redirected to entire TWRS scope
- Letter in preparation to EPA requesting concurrence with use of B Plant/WESF as an R&D facility and determination of regulatory permit requirements (M-02-00-T1)

Planned Actions (Next six months)

- Complete second round of TWRS Technology Workshops in June 1992
- Issue TWRS Fiscal Year 1993 Work Plan in September 1992

Milestone Assessment

• Schedule

MILESTONE	DESCRIPTION	DATE	STATUS
M0203	Submit TWRS baseline documents	8/93	On Schedule
M02-04	Start DST NCAW retrieval system process test	12/96	On Schedule
M02-05	Incorporate additional interim milestones to support pretreatment	8/93	On Schedule
M02-00-T1	Request concurrence on use of B Plant/WESF as R&D facility	2/92	Letter in Progress
M02-00-T2	Complete engineering study of Initial Pretreatment Module (Tank Safety Treatment Module)	12/92	On Schedule

Milestone Assessment (Cont)

• Schedule (Cont)

MILESTONE	DESCRIPTION	DATE	STATUS
M02-00-T3	Publish summary of NCRW TRUEX laboratory development work	12/92	On Schedule
M02-00-T4	Complete engineering study on Cs ion exchange	3/93	On Schedule
M02-00-T5	Complete waste treatment feed optionization (blending) study	3/93	On Schedule
M02-00-T6	Issue Technology Plan for selection of advanced (actinide) separation process	3/93	On Schedule
M02-00-T7	Initiate settling tests for NCAW in- tank solids washing	12/92 93	On Schedule

Milestone Assessment (cont)

Technical Scope

- Decision-making process being developed to establish technology needs and prioritize candidate technologies
- Technology Workshop will include national expertise to define technology needs and prioritize development of technologies
- Technology Plan(s) will document plans to develop and demonstrate candidate technologies

Special Topics/Issues

- None

Milestone Assessment (cont)

Budget vs. Cost

FYTD <u>Budget</u>	FYTD <u>Cost</u>	Spending <u>Variance</u>	FY 1992 Annual <u>Budget</u>	Variance Explanation
3.4	2.7	0.7	3.7*	Underrun due to change in approach to prepare TWRS Systems Engineering Mgmt. Plan. Planning assumed need for consultant. However, sufficient resources identified within DOE system, eliminating need for additional contracts

^{*} Reflects \$2.0 million reduction due to FY-92 budget reprioritization. Impacts are under assessment.

92125131435 (ATTACHMENT 3)

PROVIDE ADDITIONAL DOUBLE-SHELL TANK CAPACITY

MILESTONE M-31-00

G. R. KONZEK DOE-RL, TPB June, 1992

Open Commitments

- Item
 - Information copy of the FDC to Ecology and EPA
- Status
 - RL approval of the FDC is pending

Milestone Description

M-31-01 Complete Conceptual

Design Report - for up to

four tanks

Due 9/30/92

M-31-02 Recommend additional

double shell tank

milestone(s)

Due 9/30/92

M-31-02-T1 Complete detailed design for first new

tanks

Due 2/95

Milestone Description (continued)

- M-31-02-T2 Construction start of first new tanks
 Due 10/95
- M-31-02-T3 Provide additional double-shell tank capacity. Construction complete for first new tanks.
 Due 6/99

Accomplishments (Last 3 months)

- Multi-Function Waste Tank Facility
 - Completed target milestone M-31-01-T1 "Initiate permitting strategy discussions between Tri-Party Agreement signatories"
 - Functional Design Criteria has been submitted to RL for approval
 - Draft Conceptual Design has been submitted to RL for review
 - Defense Nuclear Facility Safety Board (DNFSB)
 Presentations in Washington D.C. & Richland

Planned Actions (next six months [M-31-01])

- Finalize the Functional Design Criteria
- Finalize the Conceptual Design Report
- Conduct Project Validation
- Assist DOE-HQ in an Independent Cost Estimate (ICE)
 Review
- ESAAB

Planned Actions (continued)

- Study to evaluate additional space scheduled to begin upon identification of funding (M-31-02)
 - Waste generated during retrieval
 - Waste generated during decommissioning
 - Waste generated during remediation activities, and
 - Additional mission needs as identified

Milestone Assessment

- Schedule
 - Conceptual Design has been initiated and is on schedule
 - Project Validation deffered to 6/30/92 to accomodate "Functional Requirements Review"
- Cost vs Budget (\$M)
 (Actuals Through end of April)

FYTD <u>Budget</u>	FYTD Cost	Spending <u>Variance</u>	FY 1992 Annual <u>Budget</u>	Variance Explanation
1.739	1.955	.216	2.190	Variance due to acceleration effort

Special Topics

- M-31-02 has potential problems for completion; issue has been escalated to WHC/DOE management
- Project acceleration is in trouble due to known FY 92 funding limits and anticipated FY 93 funding prioritization
- Generated an "umbrella" MSA, Multi-Function Waste Remediation Facility (MWFR)
 - MWTF
 - IPM



Initiate Hanford Waste Vitrification Plant Operations

Milestone M-03-00

R. W. Brown

Treatment Projects Office

June 9, 1992

Milestone Description

• M-03-00 "Initiate Hanford Waste Vitrification Plant (HWVP) operations"

Deliverable(s) Initiation of operations will be

considered complete when

radioactive waste is fed into the

HWVP melter

• Baseline schedule December 1999

- M-03-01
- Deliverable(s)

- "Initiate HWVP construction"
- Initiate site preparation activities
- Initiate procurement of longlead construction materials
- Initiate design of HWVP Canister Storage Building
- Baseline schedule April 1992A

- M-03-02
- Deliverable(s)

- "Complete HWVP construction"
- Construction of HWVP buildings and facilities is complete
- Contractor acceptance testing of HWVP systems is completed and accepted by HWVP Startup
- Baseline schedule June 1998

• M-03-03 "Complete Vitrification Building

and HWVP detailed design"

Deliverable(s) Transmittal of release for

construction design media to the

General Construction Contractor

Baseline schedule June 1994

• M-03-04 "Initiate construction of the

Canister Storage Building or

Multi-Purpose Storage Complex"

• Deliverable(s) Award of contract for Construction Package C-350, "Conjeter

tion Package C-350, "Canister

Storage Building"

Baseline schedule February 1993

• M-03-05 "Initiate construction of the Vitri-

fication Building foundation"

Deliverable(s) Award of contract for Construc-

tion Package C-210A, "Vitrifica-

tion Building Foundation"

Baseline schedule March 1993

M-03-06 "Initiate installation of Vitrifica-

tion Building mechanical equip-

ment and piping"

Deliverable(s) Award of contract for Construc-

tion Package C-250, "Vitrification

Building Mechanical (Pipe and

Equipment)"

Baseline schedule August 1994

• M-03-07

"Initiate installation of Vitrification Building electrical and instrumentation system"

Deliverable(s)

Award of contract for Construction Package C-270, "Vitrification Building Electrical/Instrumentation"

Baseline schedule

November 1994

Accomplishments

- Issued HWVP Preliminary Safety Analysis Report, Revision 1, in March 1992; also issued Safety Evaluation Report
- Received Key Decision Number 3A from U.S. Department of Energy-Headquarters in April 1992
- Granted "Interim Status" under Resource Conservation and Recovery Act in April 1992
- Initiated site preparation in April 1992

Accomplishments (cont)

- Completed Tri-Party Agreement Interim Milestone M-03-01, "Initiate HWVP Construction," in April 1992
- Turned over landlord management responsibilities for construction site to UE&C-Catalytic Inc.
- Completed draft HWVP Waste Compliance Plan for project internal review in February 1992

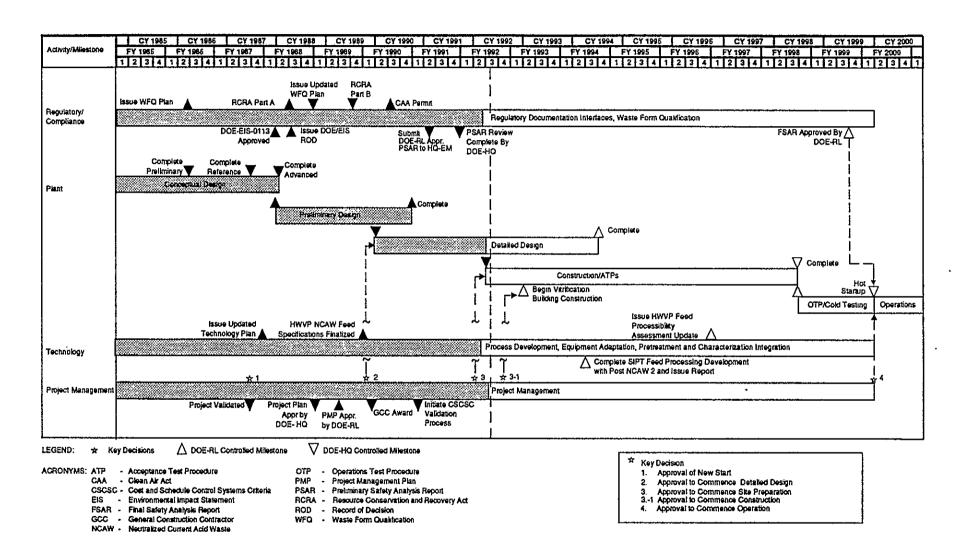
Planned Activities

- Submit Clean Air Act permit applications--September 1992
- Issue FY 1993 HWVP Applied Technology Plan--June 1992
- Issue HWVP Waste Compliance Plan, Revision 0, for Technical Review Group review--September 1992
- Issue Integrated Defense Waste Processing Facility Melter System Test Report--August 1992
- Continue definitive design with Fluor Daniel, Inc.

Planned Activities (cont)

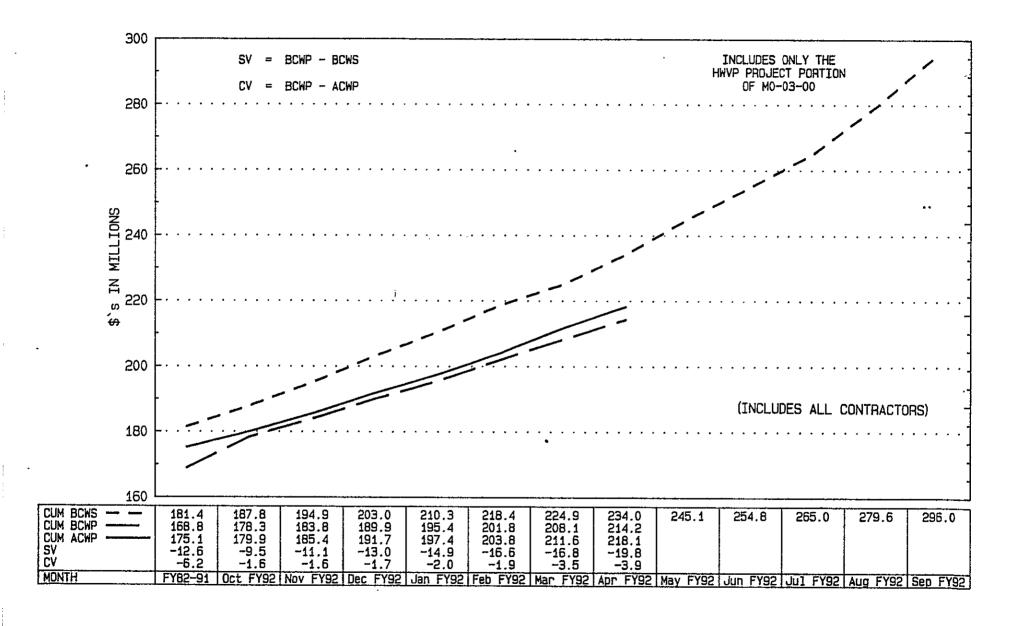
- Continue site preparation construction
- Request Key Decision Number 3B, "Approval to start construction on C-210A, C-350, and required procurement"
- Continue work with Kernforschungszentrum Karlsruhe GmbH on noble metals and with Savannah River Operations on hydrogen generation
- Work closely with DWPF on startup of the plant

HWVP Project Summary Schedule



92125131458

Cumulative HWVP Cost Performance



(ATTACHMENT 5).

Provide Annual Reports of Tank Waste Treatability Studies

Milestone M-04-00

M. Dev

Hanford Tank Waste Disposal Program

June 9, 1992

Milestone Description

• M-04-00

Wastes stored in double-shell (DST) and single-shell (SST) tanks, as well as newly generated wastes destined to be stored in double-shell tanks, will be studied to determine the most appropriate treatment/disposal method. Studies to determine the long-term feasibility of grout or glass for disposal of these wastes are included in the scope of this milestone.

DELIVERABLE(S)

The report is due annually. It is a concise addenda to the previous year's report. It will provide traceability with the activities and developments stated in the previous year's report. The areas which are covered in this report include:

- Treatability of existing and newly generated SSTs and DSTs wastes
- Feasibility of using grout and glass as a final waste form
- Safety issues, such as tank 101-SY, which impact treatment
- Other treatment/disposal technologies, such as intermediate processing, which may have an impact on future disposal

• BASELINE SCHEDULE

Submit report annually in September to the U. S. Environmental Protection Agency, and to the State of Washington Department of Ecology.

Accomplishments (Last three months)

- Los Alamos Technical Associates hired to coordinate report February 18, 1992
- Reporting Period closed February 29, 1992
- Solicitation letter to contributors and managers issued March 1992

Planned Actions (Next six months)

- Draft contributions due June 1, 1992
- Draft report issued for review June 30, 1992
- Final document released September 30, 1992

MILESTONE ASSESSMENT

- Schedule
 - On schedule
- Budget vs. Cost (\$ in 000's)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FYTD Budget	0	O	0	5	10	25	40	100	110	125	135	150
FYTD Cost	0	1	2	3	7	11	25					
Spending Variance	0	-1	-2	2	3	14	15					

Variance Explanation: M-04 is currently underrun due to the following:

 Majority of work is being performed by outside consultant, Los Alamos Technical Associates, and billing is running 1 month behind

(ATTACHMENT 6)

92126131464

SINGLE-SHELL TANK RETRIEVAL TECHNOLOGY DEVELOPMENT

Milestone M-06-00

Bruce Nicoll

Characterization and Retrieval Branch

June 1992

Milestone Description

■ M-06-00 Develop single-shell tank waste retrieval

technology and complete scale model testing.

DELIVERABLE(S)
 Evaluate various waste retrieval technologies for

single-shell tank waste forms. Evaluations of promising technologies to be performed in scale

model tank, using simulated waste.

■ BASELINE SCHEDULE Initiate testing October 1992 (M-06-02) and

complete evaluations in June 1994.

Open Commitments

 ACTION ITEM - Set up a meeting that provides a detailed programatic briefing to the regulators on M-06-00.

Responsibility - Leif Erickson

Due Date - February 26, 1992

Status - DOE to evaluate content of Draft M-06 Plan and determine method and schedule for release to regulators

- Discuss approach with HQ

Accomplishments (Last three months)

- Milestone Definition, Schedule, and Proposed Activities Developed by WHC
- TWRS Retrieval Workshop held May 12-14 on Potential Retrieval Strategies
- Planning for Test Start (M-06-02) in October 1992 Initiated
- End Effector and Conveyance System Test Plan drafted by WHC.
- End Effector Test Units and Test Bed Design completed for 337 Building
- Fabrication of Test Units Initiated by WHC

Planned Actions (Next six months)

- Discuss M-06-00 Plan Scope with Regulators
- Issue Approved M-06 Technology Development Plan
- Complete Fabrication of End Effectors for Tests of Sludge Dislodging and Conveyance System
- Construct Test Bed and prepare for October 1992 evaluation of end effectors for sludge dislodging and conveyance system
- Complete M-06-02 -- Initiate Waste Retrieval Testing in Scale Model Tank

MILESTONE ASSESSMENT

- Schedule
 - M-06-01 "Identify Technologies" Completed October 1990
 - M-06-02 on Track for October 1992
 - Plan Proposes June 1994 Completion for M-06-00

MILESTONE ASSESSMENT (cont'd)

Technical Scope

- Testing Defined in Plan for All Waste Forms
- 1/8 Sector, full-scale tank mockup in 337 High Bay proposed in plan evaluations
- Multi-Laboratory Approach to Retrieval for all Waste Forms
 - WHC Sludge
 - Lawrence Livermore Saltcake
 - Sandia In-Tank Hardware

(ATTACHMENT 7)

92125131471

FULL-SCALE DEMONSTRATION OF WASTE RETRIEVAL TECHNOLOGY

Milestone M-07-00

Bruce Nicoll

Characterization and Retreival Branch

June 1992

Milestone Description

• M-07-00

Initiate full-scale demonstration of waste retrieval technology

• DELIVERABLES

Demonstration Initiation is defined as startup of the waste retrieval equipment in the selected single-shell tank

BASELINE SCHEDULE Initiate retrieval operations - October 1997

Accomplishments (Last three months)

- Preliminary tank waste retrieval sequence developed by WHC
 - Tank waste retrieval system drivers:
 - Resolution of tank safety issues
 - Compliance with TPA milestones
 - Proceed with waste disposal
 - Provide adequate tank space
 - Tank 241-C-106 was identified as the first SST to be retrieved
 - Resolves the high heat safety issue
 - Provides early feed to the HWVP
 - Tank 241-C-106 was identified as a candidate for the M-07 demonstration

Planned Actions (Next six months)

- Initiate development of the tank selection criteria
- Continue Retrieval Technology Workshops to identify and evaluate options for SST retrieval
 - Input to Retrieval Technology Plan
 - Possible revision to the M-06 Plan
- Perform initial tank leak analyses

Milestone Assessment

• Schedule

- Preliminary work indicates that development of some technologies may not support retrieval by October 1997

Milestone Assessment (cont)

Technical Scope

- Retrieval options for first tank include sluicing, confined sluicing, long-reach manipulator, and mechanical excavation systems
- Tank leak analysis is planned to provide information to support selection of the retrieval option

Milestone Assessment (cont)

- Budget vs. Cost
 - Funding identified for M-07 related activities during April
 - Budget being established at this time
 - Reporting to start next meeting

(ATTACHMENT 8)

FULL-SCALE SINGLE-SHELL TANK FARM CLOSURE DEMONSTRATION

Milestone M-08-00

Bruce Nicoll

Characterization and Retrieval Branch

June 1992

Milestone Description

• M-08-00

Initiate full-scale tank farm closure demonstration project

• DELIVERABLES

Initiation is defined as full-scale tank waste retrieval

• BASELINE SCHEDULE

Initiate full-scale closure demonstration - June 2004

Accomplishments (Last three months)

- Initiated planning for infrastructure upgrades required for waste retrieval
 - Engineering studies planned for waste transfer system, HVAC, and electrical upgrades

Planned Actions (Next six months)

Initiate preparation of preliminary M-08 program plan

Initiate upgrade engineering studies

Milestone Assessment

• Schedule

- Activities planned for FY 1992-1994 will support M-08 demonstration
 - Program plan development
 - Detailed planning and scheduling
 - Engineering studies and functional design criteria development
 - Technology evaluations
 - Initiation of conceptual design

Milestone Assessment (cont)

Technical Scope

 Current plans are to demonstrate viable closure options, including retrieval operations, selected for implementation in the SEIS

Budget vs. Cost

- Funding identified for M-08 related activities during April
- Budget being established at this time
- Reporting to start next meeting

Single-Shell Tank Closure (M-09-00)

Tank Waste Remediation System/ **Environmental Restoration**

Ryan Pestes **Treatment Programs Division**

June 9, 1992

Milestone Description^{2 5 3 3 1 4 3 5}

o M-09-00 Complete Closure of all 149 single-shell tanks by June 2018

o Deliverables

Closure and removal of required waste from the 149 single-shell tanks will be effected in accordance with the approved closure plan(s). As stated in the Hanford Defense Waste-Environmental Impact Statement Record of Decision, a supplemental EIS will be prepared prior to making any final decisions regarding disposal of single-shell tank waste. The final closure plan(s) will address the recommendations of the supplemental EIS

o Baseline Schedule

- Complete preparation of supplemental environmental impact statement (SEIS) and issue draft for public review by June 2002 (M-9-01)
- Submit closure plan to Ecology for approval by December 2003 (M-09-02)

Accomplishments 2(last three months)

- o Formal comments were received from NAS Panel of 60% Draft of SST Systems Engineering Study
- National Academy of Science Panel Meeting #13 was held in Washington, D.C., April 28, 1992
- o TWRS SEIS draft Notice-of-Intent (NOI) was transmitted to DOE-HQ for review and comment to support accelerated issuance of TWRS SEIS/ROD (FY 1996)

Planned Actions (next six months)

- o Tank Waste Remediation System (TWRS) System Engineering Study will be revised to include all tank waste. Draft scheduled for issuance in 10/92
- o Revise the SST System Closure/Corrective Action Work Plan and submit to Ecology for review
- o Issue TWRS Supplemental EIS NOI to the Federal Register
- o Issue field characterization work plan to support GAO Audit item (GAO-RCED-89-157) to DOE-RL

Milestone Assessment 6 1 8 1 4 3 8

o Schedule

- Issue Draft TWRS System Engineering Study (Rev 1) on schedule
- Issue to Federal Register TWRS SEIS NOI on schedule
- Issue SST System Closure/Corrective Action Work Plan (Rev 1) to Ecology behind schedule
- SEIS (M-09-01) on schedule
- Closure Plan (M-09-02) on schedule
- SST Closure (M-09-00) potentially in jeopardy

MILESTONE ASSESSMENT (cont'd)

o Budget vs. Cost (\$ in 000's)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FYTD Budget	293	607	928	1305	1739	2092	2274	2499	2626	2754	2899	3079
FYTD Cost	196	470	785	1144	1575	1915	2126					
Spending Variance	97	137	143	161	167	177	148					

Variance Explanation:

The under expenditure is primarily caused by the delay in performance assessment work during the implementation of the Tank Waste Remediation System rebaselining and implementation.

Special Topics

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- o SST Waste Remediation and SST Closure Will Be Covered Under Two Separate NEPA Documents:
 - TWRS SEIS Covers SST Waste Removal and Disposal
 - HRA EIS Covers SST RCRA Closure
- o Tank Safety Issues have highest priority
- o Key planning assumptions include:
 - Tank Waste will be retrieved
 - Prioritization for tank waste characterization will be based upon tank safety resolution, safe storage, retrieval, and waste processing requirements

Complete Single-Shell Tank Interim Stabilization

Milestone M-05-00

G. E. Bishop Tank Farms Project Office

June 9, 1992

MILESTONE DESCRIPTION

o M-05-00

Complete single-shell tank interim stabilization on all tanks except C-105 and C-106 by September, 1995. Complete interim stabilization on all tanks by September, 1996.

o Deliverable(s)

Interim stabilization will be considered complete when pumping of each tank is complete. Pumping will be complete when as much liquid as practical is removed to a double-shell tank. This occurs when pumping rate drops to 0.05 gpm. At this point, only 5000 gallons of supernatant and 50,000 gallons of interstitial liquid remain in the tank.

o Baseline Schedule

Interim stabilize single-shell tanks annually beginning in FY-1989.

ACCOMPLISHMENTS (LAST 3 MONTHS)

- o Pumping suspended in January 1992, due to noxious gas issues. Pumping since delayed by criticality issue and organic issue (tank C-102 only).
 - Partially stabilized 4 single-shell tanks. (BY-102, C-102, C-107, and C-110) Milestone M-05-03.
 - Partially stabilized 1 tank (BY-109). Milestone M-05-04.
- o Issued schedule and initiated preparation for interim stabilization of nonwatchlist tanks in 241-S, U, and T farms.
- o Completed a draft of safety study of nonwatchlist tanks to appraise safety concerns on interim stabilization of these tanks.

PLANNED ACTIONS (NEXT 6 MONTHS)

- o Resume after outstanding safety issues are addressed:
 - Continue interim stabilization of 4 tanks (BY-102, C-102, C-107, and C-110). Milestone M-05-03.
 - Continue interim stabilization of 1 additional tank (BY-109).
 Milestone M-05-04.
- o Continue investigation of safety issues involved with watchlist tanks.
- o Complete the safety study of nonwatchlist tanks to appraise safety concerns on stabilization of these tanks.
- o Complete a safety study examining safety concerns that could occur during stabilization of the remaining nonwatchlist tanks not currently available for pumping.
- Negotiate changes to interim stabilization milestones M-05.

MILESTONE ASSESSMENT

o Cost vs Budget (\$M) (through April only)

FYTD		Spending	FY-92	Variance
Budget		<u>Variance</u>	Annual Budget	Explanation
4.3	3.5	0.8	6.1	Resources have been applied to higher priority work causing delays in spending.

o Schedule Performance

o M-05-03 - (4 tanks by 9-30-91)
Missed completion date. Pumping suspended for six weeks at end of August due to concerns over compliance with Wyden Amendment. Pumping restarted in 241-BY farm and 241-C farm in November. Pumping suspended on January 28, 1992, due to incident involving unidentified toxic fumes. Criticality concerns have delayed restart of pumping.

MILESTONE ASSESSMENT (continued)

- o Schedule Performance (continued)
 - o M-05-04 (9 tanks by 9-30-92)
 Milestone will not be met as currently written.
 - Five (5) tanks will be pumped following resolution of safety (criticality and organic) issues.
 - For 12 remaining nonwatchlist tanks, physical and material condition of farms impact schedule and will likely pace stabilization work of remaining tanks. A detailed scope of this work has been prepared.
 - For 27 remaining watchlist tanks, unresolved safety issues (hydrogen generation, ferrocyanide, organic and high temperature) must be addressed prior to proceeding with stabilization.

MILESTONE ASSESSMENT (continued)

o Technical Scope

- o The milestone completion remains dependent on removal of current pumping restrictions. When this will occur is unknown.
- o 44 tanks remain to be stabilized.
 - 17 nonwatchlist tanks
 - 27 watchlist tanks
- o Watchlist tanks designated by public law 101-510, section 3137 (Wyden Amendment). Most have unreviewed safety concerns over hydrogen generation or ferrocyanide content. Others contain potentially flammable organics, or high temperature.

MILESTONE ASSESSMENT (continued)

- o Technical Scope (continued)
 - o A safety study of nonwatchlist tanks is being conducted to appraise safety concerns during stabilization of these tanks.
 - o Resolution of unresolved safety issues may require presently unanticipated modifications or alterations to the affected tanks, which would delay stabilization even further.

SPECIAL TOPICS

o Issue

- Due to restrictions of transfers within tank farms due to criticality concerns, the restart of pumping has been delayed.
- o Achievement of M-05 milestone is uncertain.

o Corrective Action

o Technical issues require discussion for renegotiation of the M-05 milestone. Discussions are currently scheduled to begin on June 23. 92125131500 (ATTACHMENT 11)

SINGLE-SHELL TANK CHARACTERIZATION MILESTONE M-10-00

Paul Hernandez - USDOE/RL John Propson -WHC

Waste Characterization Program

June 9, 1992

Milestone Description

o M-10-00

Sample and analyze at least two complete core samples from each single-shell tank.

o DELIVERABLE(S)

Obtain and analyze a minimum of two core samples from each single-shell tank. Samples will be collected and analyzed to determine the characteristics of significant waste strata to support timely development of tank waste retrieval technology and to assist in preparation of single-shell tank closure plans and the supplemental EIS. Samples will be collected and analyzed in accordance with a single-shell tank waste analysis plan.

o BASELINE SCHEDULE

Complete single-shell tank waste characterization by September 1998.

Accomplishments (Last three months)

- Completed and published the "Integrated Plan Sampling Analysis of Hanford Site Wastes Measuring Greater Than 10mrem/hour" (TPA Milestone M-10-05)
- Completed FeCN NEPA Review and Safety Analysis for all FeCN tanks to be core sampled via push mode
- Completed sampling FeCN Tank C-112
- Initiated analytical gamma scanning of FeCN cores through shipping liners (Tank C-112 cores)
- Completed concept testing of rotary mode sampler and bit and identified a specific equipment design
- Completed sampling tank C-110 (11 of 20 cores to meet Milestone M-10-06 were taken through April 30, 1992)

Planned Actions

- Obtain remaining 9 of 20 core samples from single-shell tanks (M-10-06) September 1992
- Issue Waste Characterization Plan Revision 4 September 1992
- Continue development of Rotary Mode Core Sampling System
- Develop M-10-07 thru M-10-12 Recovery Strategy

MILESTONE ASSESSMENT

• Schedule Performance

0	M-10-05-T1	Issue draft Integrated Sampling Plan to Ecology - completed on schedule
0	M-10-05	Issue Integrated Sampling and Analysis Plan - completed on schedule
0	M-10-13-T1	Complete improved organic clean-up analytical method - completed on schedule
0	M-10-13-T2	Installation of hard salt cake sampler and hydrostatic balance system, scheduled for completion in June, 1992. Delay; under evaluation
0	M-10-13	Core sampling truck ready for hard salt cake sampling. Delay; under evaluation
0	M-10-06	Obtain a total of 20 core samples - should complete on schedule

MILESTONE ASSESSMENT (cont'd)

Budget vs. Cost (\$ in 000's)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept
FYTD Budget	1161	2391	3081	4218	5460	6791	7992	9217	10242	11132	12130	13147
FYTD Cost	439	1924	2907	3797	4948	6250	7310					
Spending Variance	722	467	173	422	512	541	683					

Variance Explanation: The full impact of laboratory analysis of waste tank sample cores has not been realized because such services have been directed toward other higher priority work. Secondly, the tank farm vapor incident adversely affected field work schedules and costing early in the year.

SPECIAL TOPICS

- M-10-13, Hard Salt Cake Sampling Expanded Scope
 - Envelope operation method questioned
 - Additional design, development, and testing
 - Additional design requirements
 - Vendor procurements vs. onsite fabrication

Tri-Party Agreement Milestone Review June 9, 1992

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^{*}copy coverage for ETS actions.

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